

**Evaluate Bull Trout Migration between the Tucannon River
and the Mainstem Snake River Using Streamwidth Passive Integrated
Transponder Tag Interrogation Systems**

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Data on the migration timing and distribution of PIT-tagged bull trout (*Salvelinus confluentus*) was collected by streamwidth PIT tag interrogation systems installed in the lower reaches of the Tucannon River in October 2005.

From 2002 to October 2007, 1,158 bull trout representing adult, subadult, and juvenile life stages were PIT tagged and released within the Tucannon River basin. Between October 2005 and October 2007, 30 unique bull trout interrogations were recorded within Lake Herbert G. West, suggesting that the Tucannon River population of bull trout contains a migratory component that utilizes the Snake River. The number of interrogations in 2007 (n=8) was substantially less than in 2006 (n=27). The greatest number of fish was detected in December (n=10) and March (n=18), which coincide with immigration into the mainstem Snake River and the return migration to the Tucannon River. At least seven bull trout remained in the mainstem Snake River for three months; two remained for over five months.

Forty-seven percent of the bull trout detected within Lake Herbert G. West subsequently returned to the spawning grounds within the Tucannon River headwaters. Two bull trout made repeated, consecutive year migrations between the mainstem Snake River and the Tucannon River. No bull trout originating from the Tucannon River have been observed using the fishways of lower Snake River dams.